





Government of India Ministry of Environment, Forest& Climate Change (EI Division)

2017-18

Annual Progress Report





Hosted by

Forests, Environment & Wildlife Management Department Government of Sikkim Gangtok

SIKKIM STATE ENVIS HUB

On Status of Environment & Related Issues

(STATE GOVERNMENT CENTER)





Government of India Ministry of Environment, Forests & Climate Change (EI Division)



ANNUAL PROGRESS REPORT 2017-18

 $(1^{st} April 2017 - 31^{st} March 2018)$

OF

SIKKIM STATE ENVIS HUB

On Status of Environment & Related Issues (STATE GOVERNMENT CENTER)



Forests, Environment & Wildlife Management Department
Government of Sikkim
Deorali, Gangtok – 737101

Website URL: www.sikenvis.nic.in Email ID: sik@envis.nic.in Tel (O): 03592 280381 Fax: 03592-281778, 280381



SIKKIM ENVIS HUB ANNUAL PROGRESS REPORT 2017-18

SN	INDEX	Page No
1.	Name of Host Organization	
2.	Assigned Subject Area	
3.	Date/Moth/Year of establishment of ENVIS Centre	
4.	Name and designation of ENVIS Coordinator (2017-18)	1-3
5.	Composition of an Advisory Committee	
6.	Current ENVIS Staff Structure	
7.	Mandate of the Host Organization and Mandate of the ENVIS centre	
8.	Databases 8.1 Catalogue of Non- numeric Databases compiled by the ENVIS Centre till date 8.2 Catalogue of Numeric and Time- series Database compiled by the Centre till date 8.3 New Databases developed during the Financial Year (2017-18) 8.3.1 Non- numeric Databases 8.3.2 Numeric and Time- series Databases 8.4 Status of data entry in ISBEID: (For State/UT ENVIS Centres)- As in Annex - I	4-6
9.	Information/ Knowledge Products 9.1 ENVIS Newsletters published during 2017-18 9.2 Other Publications/ information products brought out during 2017-18 9.3 Information Products published/ released so far	7-11
10.	 ENVIS Website 10.1 URL 10.2 Status of restructuring of Website 10.3 Frequency of updating Website 2017-18 10.4 Subject-specific database updation (numeric/ others) 10.5 Publication uploaded/ updated on Website 	12
11.	User Engagement and Interaction 2017-18 11.1 Total number of visits on Website 11.2 Number of unique visits on Website 11.3 Number of reports downloaded/ read by stakeholders 11.4 QueryAnswerStatistics	13-14
12.	Implementation of Annual Plan of Activities during 2017-18	15-19
13.	New Initiatives taken during 2017-18	20
14.	Date of most recent physical verification by the Ministry	
15.	Status of existing hardware	
16.	Status of Utilization of grant in 2017-18 and reasons for shortfalls, if any	21
17.	Issues/ hurdles faced in undertaking ENVIS activities	
18.	Proposed Action Plan of Activities for next Two Years 2018-19 to 2019-20	22
19.	Proposed Annual Action Plan of Activities for 2018-19	23
20.	Annex I- Status of Data Entry in ISBEID	24-36
21.	Annex II – Awareness, Training & Extension activities by ENVIS during 2017-18	37-43

Government of India Ministry of Environment, Forest & Climate Change (EI Division)

.

Annual Progress Report 2017-18 on Activities of Sikkim State ENVIS Centre

1.	Name of Host Organization:	Forests, Environment and Wildlife Management Department, Government of Sikkim, Gangtok		
2.	Assigned Subject Area:	On Status of Environment & its Rela	ated Issues	
3.	Date/Month/Year of establishment of ENVIS Centre:	MoU dated 23/03/2002 Established vide letter No: 13(1)/WB/2002 – ENVIS dated: 25/06/2002.		
4.	Name and designation of ENVIS Coordinator:	B. B. Gurung, Additional Director (Planning/ Environment & Soil Conservation)		
5.	Has the Host Organization constituted an Advisory Committee for guiding the activities of the Centre?	Yes		
	Composition of the Advisory Committee:	1. Dr. Thomas Chandy, IFS PCCF-cum Pr. Secretary	Chairperson	
	(Select YES or NO: if YES kindly fill the right column space; if NO kindly leave it blank)	2. Shri C.S. Rao, IFS APCCF (T/HQ)	Member	
	○ YES ○ NO	3. Shri J.B. Subba, IFS CF (Wildlife)	Member	
		4. Dr. Gopal Pradhan Pr. Scientist (SPCB)	Member	
		5. Shri. D. T. Bhutia Addl. Director (TT), DST&CC	Member	
		6. Shri B.B. Gurung Addl. Director (P/ E&SC)-cum- Coordinator (ENVIS)	Member Secretary	

Office Order Constituting Advisory Committee for ENVIS Centre Sikkim



GOVERNMENT OF SIKKIM DEPARTMENT OF FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT FOREST SECRETARIAT, DEORALI, GANGTOK 737102

No./ADM/FEWMD

Dated: 21/03/2015

OFFICE ORDER

Consequent upon the approval of the Competent Authority, an Advisory Committee comprising of the following officers is hereby constituted for necessary guidance and review of the activities of the ENVIS Centre on Status of Environment & Its Related Issues hosted by the Forest, Environment and Wildlife Management Department, Government of Sikkim;

1	Dr. Thomas Chandy, IFS	PCCF-cum Pr. Secretary	Chairperson
	Shri C.S. Rao, IFS	CCF (T/HQ)	Member
	Shri J.B. Subba, IFS	Director (KNP/KBR)	Member
4.	Dr. Gopal Pradhan	Pr. Scientist (SPCB)	Member
5.	Shri. D. T. Bhutia	Additional Director (TT), DST&CC	Member
6.	Shri B.B. Gurung	Joint Director (E&SC)	Member Secretary

The above Advisory Committee shall meet at least twice in a year for oversight/review of the activities of the ENVIS Centre including carrying out peer review of its information/ knowledge products, and also formulate Annual Plan of Activities for relevant prospective year.

Sd/ (Dr. Thomas Chandy) IFS PCCF-cum-Principal Secretary

Forest, Environment & Wildlife Management Department

Memo No4702-4711 /ADM/FEWMD

Dated: 21/03/2015

Copy to:

- 1) All the officers concerned above
- 2) Principal Secretary to HCM
- 3) Assistant Director, MoEF (El Division), Government of India
- 4) PS to Hon'ble Minister, FEWMD
- 5) PS to Chief Secretary
- 6) File
 - 7) Guard File

Deputy Secretary to the Government

Forest, Environment & Wildlife Management Department

Name	Position	Qualification	Joining	Joining		2017-18	
	held	and Experience	Date in ENVIS Centre	Date in current position	Leaving Date (if applicable)	Emolum (I Monthly	ents drav Rs.) Annu
Mr. Rajen Pradhan	Sr. Programme Officer	B. Tech (Computer Sc.) with 11 years experience in environment information technology	17/04/2006	20/03/2009	-	35,079/-	4,20,94
Mr. Laxuman Darnal	Information Officer	PG (Diploma) in Computer Sc. with 11 years experience in ENVIS	18/08/2006	20/03/2009	-	29,299/-	3,51,58
Ms. Renu Gurung	IT Officer (earlier IT Assistant)	BA Graduate with Diploma in computer applications, 6 years in ENVIS	16/09/2011	01/04/2017	-	23,696/-	2,84,35
Ms. Tulsha Gurung	Data Entry Operator	Cl XII pass with Diploma in computer application, 4 years in ENVIS	02/12/2013	01/04/2017	-	11,000/-	1,32,00 Suppose by the l departm till 2016

7.	Mandate of the Host Organization	Mandate of the ENVIS Centre
	The primary mandate of the host	To collect, collate, store in retrieval system and
	department is protection &	disseminate data and information on "Status of
	conservation of Forests, Environment	Environment & Related Issues"
	& Wildlife in the State.	

8. Databases:

8.1. Catalogue of Non-numeric Databases compiled by the ENVIS Centre till date:

Name of	Description	Data type	Status of Updation/	Source(s) of data	Online
Database	(in brief)	(descriptive/	Periodicity/ Data	Bource(B) of data	Availability
		graphical/	Points Compiled		(Whether
		geospatial/	(including		uploaded on
		etc.)	date/month/year of		ENVIS
			last data point)		Website)
Agriculture	Opportunities and	Descriptive	2015	Food Security	Yes
	Challenges, Agrobiodiversity of Sikkim			and Agriculture Development	
	Himalaya, Sikkim organic			Department,	
	Mission, Soil Health Card			journals,	
	Scheme			Govt.	
D 11			***	publications	**
Pollution	Air, water, noise, solid waste	Descriptive	Weekly up to Feb 2018	SPCB	Yes
Biodiversity	Comprehensive database	Descriptive,	Book published in	Govt publication	Yes
	on floral and faunal diversity of Sikkim	geospatial	2012, updated up to 2017		
Climate	Daily weather data of	Descriptive,	Book published in	Govt publication	Yes
Change in	Gangtok, district wise	geospatial	2012, data updated	22 paolitanion	
Sikkim	rainfall, monthly met data		up to Feb 2018		
	, climate synthesis report,				
	Comprehensive study report on in-depth				
	research by several				
	scholars				
Demography	Analysis on Population study of Sikkim	Descriptive, graphical	2011 Census	Census of India	Yes
Disaster	History of Earthquakes,	Descriptive	2017	Disaster	Yes
	landslides, forest fires			Management	
				Department, Newspapers	
Ecotourism	Policy, trek, permits and	Descriptive	2018	Forest deptt	Yes
200000000000000000000000000000000000000	fees, ecological study,	2 escriptive	2010	T of our work	100
	festivals.				
Energy	Electricity and energy	Descriptive	Annual up to 2015	Power and	Yes
Ensinement	consumption	Daganinting	2017	Energy Deptt	Vas
Environment	EIA, EMP, SoE report, carrying capacity study	Descriptive	2017	Forest deptt	Yes
	report, ECs, etc.				
Forest	Forest types, SFRs,	Descriptive	2017	FSI, State Forest	Yes
Resources	JFMCs, EDCs	-		deptt	
Land and	Watershed, Wetlands,	Descriptive	2017	SAC, ISRO,	Yes
Water	Wasteland, Rivers,			Journals,	
Resources	landslide and soil treatment, water quality of			Forest deptt	
	river Ratey Chu – Source				
	of Gangtok				
Wildlife	PAs, KNP, eco-sensitive	Descriptive	2017	Forest deptt	Yes
	and conservation zones,				
	Management Plans, Nomination dossier of				
	KNP for world heritage				
	site, compensation				
	guidelines				
Soils and	Geology and Mineral	Descriptive	2017	Mines Minerals	Yes
Minerals	Resources of Sikkim,			and Geology	

Name of	Description	Data type	Status of Updation/	Source(s) of data	Online
Database	(in brief)	(descriptive/	Periodicity/ Data		Availability
		graphical/	Points Compiled		(Whether
		geospatial/	(including		uploaded on
		etc.)	date/month/year of		ENVIS
			last data point)		Website)
	Mineral reserves in			Deptt	
	Sikkim, Soil resources				
Sericulture	Mulberry, muga and eri	Descriptive	2016	Forest deptt	Yes
	culture practices in Sikkim				

8.2. Catalogue of Numeric and Time-series Databases compiled by the Centre till date:

Name of Database	Description (in brief)	Time Period (Starting year- Ending year) and Periodicity (annual/ monthly/ other)		Online Availability (Whether uploaded on ENVIS Website)
Agriculture	Area, Production and Productivity of Rice, Wheat, Maize, Finger Millet, Barley, Buckwheat, Pulses, Oilseeds	Annual (2003-04 to 2014-15)	Food Security & Agriculture Development Deptt	Yes
Air Quality of Sikkim (8 locations)	PM ₁₀ , SOx, NOx	Annual, Monthly, Weekly (2018)	SPCB	Yes
River Water Quality	pH, BOD, T Coliform etc	Monthly (2011, 2012, 2013, 2014, 2015)	SPCB	No
Biodiversity	Statistics on species availability	Annual up to 2017	Forest deptt	Yes
Climate	Temperature, rainfall etc	Monthly, Annual 1996-2017	IMD	Yes
Demography	Demography statistics	2001, 2011	Census of India	Yes
Earthquakes	History of Earthquakes	1839 -2015	Disaster Management Deptt	Yes
Forest Fire Cases	Forest fire cases in Sikkim	2004 – 2017	Forest deptt	Yes
Electricity Consumption	Category wise consumption	Annual, 2008-09 to 2014-15	Power & energy deptt	Yes
Energy Consumption	Per capita consumption, Power from National grid, hydel power generation	Annual 2002-03 to 2014-15	Power & energy deptt	Yes
Forest Statistics	Forest cover statistics of Sikkim	1987 to 2017	FSI	Yes
Wetlands of Sikkim	Altitude wise no of lakes and area	2003 and 2017	SAC, ISRO, Ahmedabad	Yes
Mineral Reserves in Sikkim	Status of mineral development in Sikkim	Annual, 2016	Mines, Mineral and Geology Deptt	Yes
Protected Areas of Sikkim	Profile of Wildlife sanctuaries and National Park	2018	Forest deptt	Yes
Disaster	History of Earthquakes, landslides, forest fires	2017	Disaster Mgmt Deptt. Newspapers	Yes
Ecotourism	Policy, trek, permits and fees, ecological study	2018	Forest deptt	Yes
Energy	Electricity and energy consumption	Annual up to 2016	Power and Energy Deptt	Yes

8.3. New Databases developed during the Financial Year (2017-18)

8.3.1. Non-numeric Databases:

Name of	Description	Data type	Status of Updation/	Source(s) of	Online
Database	(in brief)	(descriptive/	Periodicity/ Data	data	Availability
		graphical/	Points Compiled		(Whether
		geospatial/	(including		uploaded on
		etc.)	date/month/year of		ENVIS
			last data point)	_	Website)
Biodiversity	Fishes, Lizards, Snakes, Birds, Butterflies, Bees, Carnivorous animals of KBR, Amphibians, Insects and Beetle diversity	Descriptive	2017	Govt publication	Yes
Pollution	Water Quality of Rivers	Descriptive	2017	Forest Deptt	Yes
	Industrial Air Quality	Descriptive	2017	SPCB	Yes
	Air Quality of Major Towns	Descriptive	2018	SPCB	Yes
	Hazardous Waste of Sikkim	Descriptive	2017	SPCB	Yes
	Consent Forms	Descriptive	2018	SPCB	Yes
	Noise Pollution	Descriptive	2017	SPCB	Yes
KNP	Inscription of Khangchendzonga National Park as World Heritage Site	Descriptive	2017	Forest Deptt	Yes
Ecotourism	Ecotourism zones of Sikkim	Descriptive	2017	Forest Deptt	Yes
	Organizational manual	Descriptive	2017	Forest Deptt	Yes
Solid Waste	Management Rules, Municipal Bodies and Nagar Panchayat	Descriptive	2016	Forest Deptt	Yes
ORS	Online Research Permit System	Descriptive	2017	Forest Deptt	Yes
Wildlife	Human Animal Conflict	Descriptive	2017	Forest Deptt	Yes
Disaster	Dzongu Landslide	Descriptive	2017	Forest Deptt	Yes
Forestry	Heritage Trees of Sikkim	Descriptive	2017	Forest Deptt	Yes

8.3.2. Numeric and Time-series Databases:

Name of Database	Description (in brief)	Time Period (Starting year- Ending year) and Periodicity (annual/ monthly/ other)	Source(s) of data	Online Availability (Whether uploaded on ENVIS Website)
Pollution	Industrial Air Pollution	Monthly 2015	SPCB	Yes
	Air Quality of Major Towns	2018	SPCB	Yes
	Water Quality of Rivers	2010-2017	SPCB	Yes
	Hazardous Waste	2015-2017	SPCB	Yes
	Noise Pollution	2014, 2015, 2016, 2017	SPCB	Yes
Agriculture	Area, Production and Productivity of Major Crops	2003-04 to 2014-15	Food Security & Agriculture Dev. Deptt	Yes
River Water Quality	pH, BOD, T Coliform etc	Monthly	SPCB	No
Climate data	Daily weather report and four days forecast of Gangtok town	Daily basis	IMD	Yes
Rainfall	District wise rainfall data	2009-2017	IMD	Yes
Forestry	53 Heritage Trees of Sikkim	2017	Forest Deptt	Yes

8.4. Status of data entry in **ISBEID**: (For State ENVIS Hubs) – As in ANNEXURE (Pg 24)

9. Information/ Knowledge Products:

9.1. ENVIS Newsletters published during the Financial Year (2017-18):

Cover snapshot	Quarter/ Volume/ Issue/ Theme	Number of copies	URL of the PDF file in
•		printed and	ENVIS website
	Main Articles	circulated	
PANDA	2017 Special Newsletter edition title <i>PANDA Vol. 9</i>	2000 nos (60 Paged)	http://sikenvis.nic.in/Wri teReadData/Publication/ Sikkim%20ENVIS%20-
Khanuchanizonya National Park weets santacent	60 paged special edition ENVIS newsletter on scientific research articles, write-ups, observations and notes on flora, fauna, ecotourism, wildlife, climate	Supported by host organization	%20PANDA%20News%2 OMaganie%20Vol%209.p df
day for your constraints of the	change and other important environment issues over the year 2016-17 of Sikkim State. The newsletter is a compilation of articles received from foresters, environmentalists, scientists, scholars, students and volunteers.	Released by the Hon'ble Forest Minister of Sikkim on June 5, 2017	
SIRKIM STATE ENVIS NEWSLETTER The large famous to have to	1 st Qtr (Apr-Jun) Vol. 10, Issue 1	500 nos.	http://sikenvis.nic.in/ WriteReadData/Public
Payavaran Mahotav 2017 Payava	Rhododendron abhayae a new species from Sikkim Himalaya, Paryavaran Mahotsav 2017, Chief Minister's Green School Rolling Trophy, World Environment Day, Ten Minutes to Earth, State Green Mission, Smritivan, First Bhairon Singh Shekhawat Lifetime Achievement Award to Sikkim CM, Green Stories from School Eco-Clubs, Nature based festivals of Sikkim,	(12 Paged)	ation/ENVIS%20Newsl etter%202017- 18%20Vol%2010%20Is sue%201%20(Apr- Jun).pdf
SKKM STATE SHOWN STATE PROVIS NEWSLETTER	2 nd Qtr (Jul-Sep) Vol. 10, Issue 2	500 nos.	http://sikenvis.nic.in/ WriteReadData/Public
City World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Staking Cut Shirt Parama Clambing One World Grand Prix Award to Shirt Parama Clambing One World Grand Prix A	Mucuna laticifera a new species from Sikkim Himalaya, One World Grand Prix Award to Sikkim CM, Organic Sikkim, earthain school programme, ozone heroes, significant findlings in new wildlife survey, swachh vidyalaya puraskar, Prakriti Paryavaran Aur hum, Green march, Swachhta Hi Seva, Pictorial map of South Sikkim, Major ginsenoside contents in rhizomes of Panax sokpayensis and Panax bipinnatifidus,	(12 Paged)	ation/ENVIS%20NewsI etter%202017- 18%20Vol%2010%20Is sue%202%20(Jul- Sep).pdf
SIKKIM STATE SIKKIM STATE O Entributed to bind has been	3 rd Qtr (Oct- Dec) Vol.10, Issue 3	500 nos.	http://sikenvis.nic.in/ WriteReadData/Public
ACM AND THE STATE OF THE STATE	Amphibians of Sikkim - Two New Records for the State, Mith Trees, Minimal pollution during Deepawali festival in Sikkim, Ban on Firecrackers, Sidkeong Tulku Bird Park, a flock of broadbill flight turns deadly, Tinjurey a shot nature trek, Popularizing local medicinal plants bhakimlo and mel, Green Teachers Training	(12 Paged)	ation/ENVIS%20Newsl etter%202017- 18%20Vol%2010%20Is sue%203%20(Oct- Dec).pdf

9.2. Other publications/ information products brought out during the Financial Year (2017-18):

Cover snapshot	Publication/ Product	Number of copies	URL of the PDF file
Cover shapshot	Tublication/Troduct	printed and	in ENVIS website
	Theme(s)/ Subject Area(s)	circulated	111 21 () 12 () COSICO
	Pamphlet on State Government's Initiative on Forestry, Environment and Wildlife Management Bilingual (English and Nepali) pamphlet especially published as awareness material for newly elected panchayats of the State.	1500 Copies each = 3000 nos Supported by host organization	http://sikenvis.nic.in/ WriteReadData/UserFi les/file/Sikkim%20Envi ronment%20Initiatives %20English.pdf English http://sikenvis.nic.in/ WriteReadData/UserFi les/file/Sikkim%20Envi ronment%20Initiatives
PARYAVARAN MAHOTSAV 2015 White the second of the second o	Activity Book on 'Paryavaran Mahotsav 2016' Sikkim celebrated the 4 th successive Paryavaran Mahotsav 2016. This 92 paged pictorial book highlights activities carried out throughout the State though mass public participation. The activities such as plantation drives, cleanliness drives, signature campaigns, Greenathon events and various other activities are highlighted in this publication.	1000 nos (92 pages) Supported by host organization Released by the Hon'ble Governor of Sikkim on June 25, 2017	%20Nepali.pdf Nepali http://sikenvis.nic.in/ WriteReadData/Public ation/Paryavaran%20 Mahotsav%202016.pd f
State of Environment Report Sikkim 2016	State of Environment Report Sikkim 2016 This will be second SoE Report for Sikkim by ENVIS. First edition was published in 2007.	1000 copies under print (126 pages)	To be released
WHITE PAPER ON FOREST, ENVIRONMENT & WILDLIFE MANAGEMENT DETAKTIMENT GOVERNMENT OF SIKKIM 1984-95 to 2017-18	White Paper on Forestry, Environment and Wildlife Initiatives of the State Government 1994-95 to 2017-18 ENVIS was assigned to compile and prepare this comprehensive report for submission to the State Legislative Assembly.	130 copies (165 pages) Supported by host organization	Restricted document. Not available online

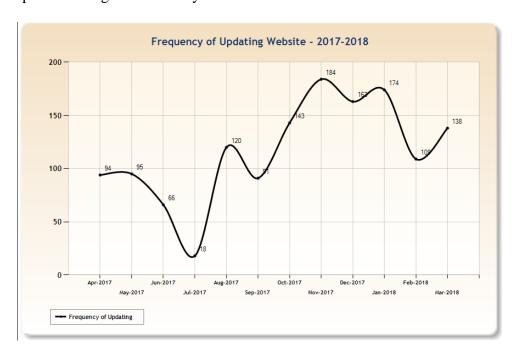
9.3 Information Products published/ released during last five years (2012-13 to 2016-17):

SN	Year	Publication Title	Theme(s)/ Subject Area(s)	URL of the PDF file in ENVIS website
1.	2012-13	Newsletter PANDA Vol 5	Environmental Sustainability Index 2011, State Forest Statistics 2011, Key Statistics, Demography, Climate Change Indicators in Sikkim, Recent sightings and findings, Himalayan Landscape, Man and Macaques	http://sikenvis.nic.in/WriteReadData/Publication/Download%20PANDA%202013.pdf
2.		Environment Consciousness in Sikkim	Study report to assess the environment consciousness of citizens of Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/EC% 20Report_CDF_IFMR.pdf
3.		Forest for Sustainable Livelihood	A concept note on forest and sustainable livelihoods	http://sikenvis.nic.in/WriteReadData/Publication/Forest%20 for%20Sustainable%20Livelihood%20%2 0NEAC% 202012.pdf
4.		Biodiversity - All Creatures Great and Small	Biodiversity - All Creatures Great and Small. Floral and Fuanal Wealth of Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/ DOWNLOAD%20Biodiversity%20- %20All%20Creatures%20Great%20and%20Small.pdf
5.		Study of Ecological, Socio-Economic and Livelihood Dimensions of Grazing exclusion in Protected Forests of West Sikkim	Study of Ecological, Socio- Economic and Livelihood Dimensions of Grazing exclusion in Protected Forests of West Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/Download% 20Study%20Report%20on%20Grazing%2 0Ban%20in%20 West%20Sikkim.pdf
6.		National Green Corps – Sikkim	School Eco-Club Success Stories from Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/NGC-SIkkim-Report%202012-web.pdf
7.	2013-14	Quarterly Newsletter Vol 6 Issue 1 (Apr-Jun)	Biodiversity Conservation, Oaks species of Species	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202013-14%20Vol%20VI%20Issue%201.pdf
8.		Quarterly Newsletter Vol 6 Issue 2 (Jul-Sep)	Wastelands of Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Sikkim%20Newsletter%202013- 14%20Vol%20VI%20Issue%202%20v2.pdf
9.		Quarterly Newsletter Vol 6 Issue 3 (Oct-Dec)	Protected Area Network in Sikkim, Gochela trek	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Sikkim%20Newsletter %202013- 14%20Vol%20VI%20Issue%203%20v2.pdf
10.		Newsletter PANDA Vol 6 Issue 4	Sikkim Fishes, Magnolia taxa, Ratey chu watershed, Green lake expedition, Gangtok windstorm	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Sikkim%20Newsletter %20PANDA%20Vol%206.pdf
11.		Biodiversity Conservation	Concept note on Biodiversity Conservation	http://sikenvis.nic.in/WriteReadData/Publication/NEAC-Biodiversity%20Conservation.pdf
12.		Sidkeong Tulku Bird Park	Pamphlet on Sidkeong Tulku Bird Park, West Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/Sidkeong %20Tulku%20Bird%20Park.pdf
13.	2014-15	Quarterly Newsletter Vol 7 Issue 1 (Apr-Jun)	Paryavaran Mahotsav, State Green Schools Award, CM Rolling Trophy, Green wave, world environment Day	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202014-15%20Vol%207%20Issue%201.pdf
14.		Quarterly Newsletter Vol 7 Issue 2 (Jul-Sep)	Eco-Sensitive Zones in Sikkim, Sustainable Environment Initiative at School, Green Roads Mission	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202014- 15%20Vol%207%20Issue%202.pdf
15.		Quarterly Newsletter Vol 7 Issue 3 (Oct-Dec)	Swachh Bharat Swasthh Sikkim, Solid Waste Profile of Gangtok, Legal Framework for Solid Waste	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202014- 15%20Vol%207%20Issue%203.pdf

SN	Year	Publication Title	Theme(s)/ Subject Area(s)	URL of the PDF file in ENVIS website
			Management, , Healthcare Waste Management	
16.		Newsletter PANDA Vol 7 Issue 4 Special edition	KNP, Shapi, Yartsa gunbu, polygala arillata, myna, tinjurey ecotourism, important bird area of Sikkim, Lampokhari, gurugongmar, bird bioacoustics	http://sikenvis.nic.in/WriteReadData/Publication/Panda%20Volume%20No%207.pdf
17.		Paryavaran Mahotsav 2013	Pictorial book report on fortnightly environment festival of Sikkim June 15-30, 2013	http://sikenvis.nic.in/WriteReadData/Publication/Paryavaran%20Mahotsav%202013 %20web1.pdf
18.		Environmental Initiatives of Sikkim 1995-2015 Bilingual (English and Nepali)	Booklet on Environmental Initiatives of Sikkim 1995-2015	http://sikenvis.nic.in/WriteReadData/Publication/Env%20Initiatives%20of%20Shri%20Pawan%20Chamling%20English%202015.pdf (ENGLISH)http://sikenvis.nic.in/WriteReadData/Publication/Env%20Initiatives%20of%20Shri%20Pawan%20Chamling%20Nepali%202015%20web.pdf (NEPALI)
19.		Sikkim State Action Plan on Climate Change	Sikkim State Action Plan on Climate Change	http://sikenvis.nic.in/WriteReadData/Publication/Sikkim%20State%20Action%20Plan%20on%20Climate%20Change%20web.pdf
20.		Management Plan of Khangchendzonga National Park	Management Plan of Khangchendzonga National Park (2008-2018) (Online publication)	http://sikenvis.nic.in/WriteReadData/Publication/KNP-Management%20Plan%20- %20WEB.pdf
21.		Eco-Club Handbook	Guidelines for Eco-Club and Green Schools State Awards	http://sikenvis.nic.in/WriteReadData/Publication/NGC%20ECO%20 CLUB%20HANDBOOK.pdf
22.		National Green Corps - Sikkim Report	National Green Corps - Sikkim Activity Report	http://sikenvis.nic.in/WriteReadData/Publication/NGC-Sikkim-Report-2015-web.pdf
23.		Rapid Biodiversity Survey Report -I	Rapid Biodiversity Survey Report of Sikkim- First Phase	http://sikenvis.nic.in/WriteReadData/Publication/Rapid%20Biodiversity%20Survey%20Report%20-%20I.pdf
24.	2015-16	Quarterly Newsletter Vol 8 Issue 1 (Apr-Jun)	International Conference on Conservation of Natural and Cultural values of Khangchendzonga National Park, Reconstitution of SEIAA and SEAC Sikkim, ban on firecrackers, ban on slash burning in Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202015-16%20Vol%208%20Issue%201%20(AprJun).pdf
25.		Quarterly Newsletter Vol 8 Issue 2 (Jul-Sep)	Red Panda conservation breeding program in Sikkim, Inception workshop on preparation of 2nd State of Environment Report for Sikkim, Green Teacher's Training for 250 schools of Sikkim, Painting and Essay competition, ozone day, green consumer day	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202015-16%20Vol%208%20Issue%202%20(Jul-Sep).pdf
26.		Quarterly Newsletter Vol 8 Issue 3 (Oct-Dec)	Safaigiri awards, Gangtok the cleanest hill station, Okharey ecotourism carnival, Living with wildlife, India's INDC to UNFCCC, Science Express Climate Action special	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202015-16%20Vol%208%20Issue%203%20(Oct-Dec).pdf
27.		Newsletter PANDA Vol 8 Issue 4 Special edition	Yartsa gunbu, Sikkim himalayan rhododendron, pleione, oroxylum indicum, pagolakha wildlife sanctuary, new lake kip tso, isabelline wheatear	http://sikenvis.nic.in/WriteReadData/Publication/Panda%20Vol%208%20Final%202016.pdf

SN	Year	Publication Title	Theme(s)/ Subject Area(s)	URL of the PDF file in ENVIS website
28.		Paryavaran Mahotsav 2014	Pictorial book report on fortnightly environment festival of Sikkim June 15-30, 2014	http://sikenvis.nic.in/WriteReadData/Publication/Sikkim% 20Paryavaran%20Mahotsav%202014%20- %20web.pdf
29.		Handbook on Nature based Festivals of Sikkim	Nature based Festivals of Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/Hand%20Book%20of%20Nature%20Based%20Festival%20of%20Sikkim%2005-06-15%20web.pdf
30.		Rapid Biodiversity Survey Report -II	Rapid Biodiversity Survey Report of Sikkim- Second Phase	http://sikenvis.nic.in/WriteReadData/Publication/Rapid%20Biodiversity%20Survey%20Report%20-%20II.pdf
31.		Heritage Trees of Sikkim	Photo album of notified Heritage trees of Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/SIKKIM%20STATE%20HERITAGE%20TREES.pdf
32.	2016-17	Newsletter PANDA Vol 9 Special edition	60 paged special edition ENVIS newsletter on scientific research articles, write-ups, observations and notes on flora, fauna, ecotourism, wildlife, climate change and other important environment issues over the year 2016-17 of Sikkim State.	http://sikenvis.nic.in/WriteReadData/Publication/Sikkim%20ENVIS%20- %20PANDA%20News%20Maganie%20Vol %209.pdf
33.		Quarterly Newsletter Vol 9 Issue 1 (Apr-Jun)	Paryavaran Mahotsav 2016, Heritage Trees of Sikkim, WIPRO's Earthian School Programme, Ban on Styrofoam, Ban on Packages Drinking Water Bottles in Government Functions and meetings	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202016-17%20Vol%209%20Issue%201%20(Apr-Jun).pdf
34.		Quarterly Newsletter Vol 9 Issue 2 (Jul-Sep)	KNP inscribed as UNESCO's World Heritage Site, Khangchendzonga National Park, Gangtok awarded cleanest tourist destination of India, Landslide at Mantam, Dzongu, North Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202016-17%20Vol%209%20Issue%202%20(Jul-Sep).pdf
35.		Quarterly Newsletter Vol 9 Issue 3 (Oct-Dec)	Sustainable Development Leadership Award to Shri Pawan Chamling Chief Minister of Sikkim, Wildlife Population Estimation Study in Sikkim, Human Wildlife Conflict in Sikkim, Greater Rangit Ecotourism festival	http://sikenvis.nic.in/WriteReadData/Publication/ENVIS%20Newsletter%202016-17%20Vol%209%20Issue%203%20(Oct-Dec).pdf
36.		Environmental Initiatives of Sikkim 1994-2016	Environmental Initiatives of Sikkim 1994-2016	http://sikenvis.nic.in/WriteReadData/Publication/Environmental%20Initiatives%20of%20Sikkim%2015%20Aug%202016.pdf
37.		Nature's Marvel	A Pictorial Pocket Sized Booklet on the Faunal Diversity of Sikkim	http://sikenvis.nic.in/WriteReadData/Publication/Natures-Marvel.pdf
38.		Paryavaran Mahotsav 2015	Activity Book on 'Paryavaran Mahotsav 2015'	http://sikenvis.nic.in/WriteReadData/Publication/Final%20Paryavaran%20Mahotsav%202015.pdf

- **10. ENVIS Website**(*ENVIS Centres whose Website has been restructured may provide the Performance Report/Graphs generated therein wherever possible*):
 - 10.1. URL: www.sikenvis.nic.in
 - **10.2. Status of restructuring of Website:** Restructured and made live on 26/11/2012
 - **10.3. Frequency of updating Website 2017-18** (as on 31-Mar-2018) The monthly average frequency of updation for 2017-18 is over **116** updates **per month.** Total **1395 updates** have been made during 2017-18 as on 31st of March, 2018. The updates during June and July was hindered due to web server error.



Months	Publications	Subject Area	Glossary	Bibliography	Major Activity	Kids Centre	Upcoming Events	Latest News	Photo Gallery	Frequency of Updating
Apr-2017	2	15	0	56	0	0	8	10	0	94
May-2017	1	17	0	67	0	0	4	6	0	95
Jun-2017	2	3	0	25	0	0	1	6	29	66
Jul-2017	1	0	0	13	0	0	2	2	0	18
Aug-2017	0	14	0	76	16	0	9	5	0	120
Sep-2017	1	19	0	65	0	0	1	5	0	91
Oct-2017	2	23	0	98	12	0	5	3	0	143
Nov-2017	5	20	0	140	0	0	3	16	0	184
Dec-2017	0	5	0	147	0	0	7	4	0	163
Jan-2018	1	22	0	138	0	0	5	8	0	174
Feb-2018	2	11	0	87	0	0	2	7	0	109
Mar-2018	1	23	0	106	0	0	4	4	0	138

- **10.4. Subject-specific database updation (numeric/ others): 172** updates have been made during 2017-18 as on 31-Mar-2018 alone in the subject-specific database.
- **10.5. Publication uploaded/ updated on Website: 18** updates (*including journals, pamphlets, newsletters and book publication*)

11. User Engagement and Interaction (last three years)

	User engagement and interaction	FY 2015-16	FY 2016-17	FY 2017-18
i.	Total number of visits	2,53,172	3,51,826	5,34,217
ii.	Number of unique visits	48,924	41,082	52,471
iii	. Reports Downloaded/Read	994	1,247	1,011
iv	. Total Number of Queries	1400	1779	1898
	received			
v.	Number of Queries responded	1400	1779	1898
vi	. Grade received	81 'A'		

- 11.1 Total number of visits on Website (2017-18): 5,34,217 (As on 31-Mar-2018)
- 11.2 Number of unique visits on Website (2017-18): 52,471 (As on 31-Mar-2018)



Months		Visits			Unique Visitors	
Months	Indian	Rest of the world	Total	Indian	Rest of the world	Total
Apr-2017	12261	20548	32809	2732	2712	5444
May-2017	14810	23911	38719	2534	2185	4719
Jun-2017	15620	31904	47522	2652	2111	4763
Jul-2017	13398	28925	42322	2560	2063	4623
Aug-2017	19562	31647	51206	4523	3295	7818
Sep-2017	15671	33006	48674	3178	2646	5824
Oct-2017	16150	40222	56372	2375	2267	4642
Nov-2017	16961	36246	53206	2877	2187	5064
Dec-2017	12210	37891	50100	2462	3525	5987
Jan-2018	15855	22702	38554	2559	2440	4999
Feb-2018	6694	23999	30689	2263	2818	5081
Mar-2018	10681	33463	44142	3560	2777	6337

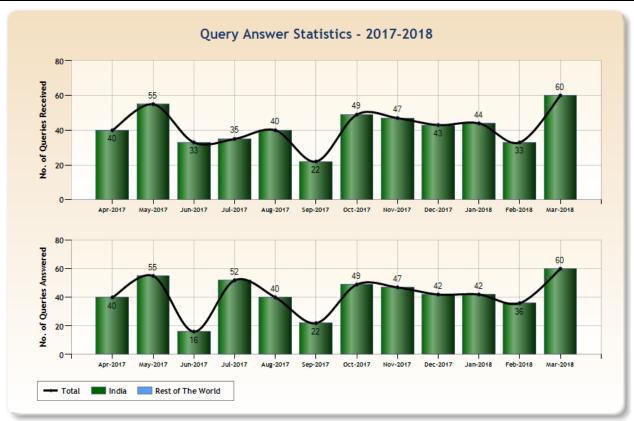
11.3 Number of reports downloaded/ read by stakeholders:

Total 1,011 downloads have been observed during 2017-18 as on 31-Mar-2018 in which about 55% of the downloadable items have been accessed from the Publications module and about 44% of the items have been downloaded from the subject area module. However, this figure is only restricted to sections of the website which require user login. The actual download figures is expected to be much more since 70% of the reports content of the website especially the subject area content have now been uploaded with direct URL of pdf files due to user demand.

	Kids Centre			Publications		Subject Area		Report Read/Downloaded				
Year	India	Rest of the world	Total	India	Rest of the world	Total	India	Rest of the world	Total	India	Rest of the world	Total
01 Apr 2017												
-	1	0	1	528	25	553	438	15	453	971	40	1011
31 Mar 2018												

11.4 Query-Answer Statistics 2017-18:

Mode of Query Receipt	Number of Queries Received	Number of Queries Responded	Reasons for shortfalls, if any, and action taken to rectify
Online (CMS based website)	501	501	-
Email (official NIC server)	490	490	-
Postal/Telephonic (incl. hand	242	242	-
post)			
Physical	665	665	-
Total	1898	1898	



12. Implementation of Annual Plan of Activities of the Financial Year (2017-18):

Activity/ Target	Achievements	Shortfalls, if any, and reasons therefore
Centre's proposed activities 2017	-18	Teasons therefore
1. ISBEID data collection and data entry for 2017 year onwards as ongoing activity in all 17 modules.	Total 631 nos of new updates have been made during 2017-18 as on 31-Mar-2018	
Publication State of Environment Report (SoER) 2016	The report is prepared and approved by the competent authority of the State Government. The report is currently under print and will be released soon.	
3. Monitoring of key 20+ environment related parameters and reflecting in the spatial form (Pakriti maps, grid based spatial content) as per the directives of the ENVIS secretariat.	Pictorial map for South District prepared. For activities relating to GRID based spatial content, directives from the ENVIS Secretariat is awaited and will be carried from 2018-19 onwards. The district selected initially is East Sikkim for GRIDSS.	
4. Enriching the Subject-wise database with climate change related information on glacial study, and vegetation carbon pool assessment study. Updation of Subject-wise databases modules of the website (www.sikenvis.nic.in) as an ongoing activity.	172 new updates have been made in the subject area module during 2017-18 as on 31-Mar-2018. Updates have been made on pollution statistics on weekly basis, daily climate characteristics, forestry, wildlife and environment initiatives in a comprehensive manner.	
5. Extension and Outreach programmes at district and village level including awareness programmes at SECAS platform, Village Sensitization on the occasion of environment calendar days, cleanliness drives etc.	Extension and outreach programmes for sensitization on environmental issues were conducted on monthly basis focusing on environment calendar days such as World Environment Day, Ozone Day, SECAS platform activities at nearest railway station viz New Jal Paiguri (NJP) etc and the same was highlighted in the monthly progress report submitted to the ENVIS Secretariat.	
6. Facilitation of online research permits in Sikkim.	This application is hosted in NIC domain and a web page in ENVIS portal under major activity section has been published to access the online permit application. This application will reduce the paper work and facilitate the research scholars as well as to track their application status.	
7. Integration of ENVIS Services (query response, website visits) into e-taal platform and mapping of ENVIS scheme on the PFMS platform.	ENVIS Scheme has been successfully mapped in PFMS platform and EAT module is in full implementation for facilitating DBT.	As the ENVIS portal has been migrated to cloud server, integration with e-taal has been scheduled later.

Activity/ Target	Achievements	Shortfalls, if any, and
8. Publication of Quarterly Newsletters, special edition 52 paged PANDA news magazine, and Knowledge products in the form of pocket- sized booklet/ pamphlets/ Short Video Films/ DVDs on Forest Wildlife in Sikkim and Environment Management in Sikkim.	State ENVIS Hub has published 60 paged special edition PANDA news magazine Vol 9 and quarterly newsletters vol 10, 3 issues. Besides add-on publications such as pamphlets, pictorial reports, SoE Report have also been published during 2017-18.	reasons therefore
9. Integration of Bhuvan/ Bharat Maps/ Google Maps based thematic/ spatial data and information in the existing CMS based website.	Attended 2-days training –cum-workshop on GRIDSS/ GIS/ Geo-mapping of district level data at BISAG, Ahmedabad, Gujarat on September 22-23, 2017. Questionnaire for mapping district level data for EAST Sikkim drafted by the ENVIS Secretariat.	
10. Serve as the nodal in-charge for online updation of data and information on Status of Environment and its related issues pertaining to Sikkim.	Updation and upkeep of online content in ENVIS website is a regular and ongoing activity.	
11. Coordinate National Green Corps (NGC) programmes in Sikkim as a Nodal Resource Agency and collaborate with resource agencies like WIPRO Bangalore, CEE Guwahati and CSE new Delhi in spreading environment and education at the school level.	Training programmes for 2017 session were organized for 100 schools during July 2017 and for 200 schools during October 2017 in partnership with WIPRO and CSE, New Delhi respectively. 761 School eco-clubs strengthened by provision of environment kits and resource materials.	
12. Support the host department in environment awareness programmes in the State with resource materials like pamphlets, brochures, handbooks, posters, banners, fyers, signages etc.	Bilingual pamphlet in English and Nepali prepared, DVDS etc on environment initiatives and policies as awareness material and distributed widely during environment calendar days.	
	IN ACCORDANCE TO ENVIS MANDATE:	2017-18
A. Regular Activities: Web-base		
Collection and Compilation of		
1. Development and regular updation of <i>databases</i> (descriptive, numeric, pictorial, geospatial, etc.) on the assigned subject area and regular uploading of the same in the <i>Subject Area</i> section of the ENVIS Website, after due verification/ authentication, with suitable referencing of data sources.	172 number of updates done in the subject area module of the website during 2017-18 as on 31-Mar-2018. The information content of the subject area quoted with authentic sources.	
2. Compilation of <i>Abstracts</i> , <i>Bibliography</i> , <i>News articles</i> ,	1018 bibliography, 18 journals, abstracts and other publications	

Activity/ Target	Achievements	Shortfalls, if any, and
Events, etc. on the subject area	uploaded in the website.	reasons therefore
and uploading the same in the	uploaded in the website.	
relevant section of ENVIS		
Website.		
3. Identification of data gaps and	631 new data updates on ISBEID	
formulation with	made.	
implementation of action plan		
to fill them.		
Maintenance of ENVIS Website an		
4. Maintaining the ENVIS	Centre's website has been kept up-to- date with frequency of updates	-
Website up-to-date and user- engaging, and as an inventory	averaging to 116+ updates per month.	
of authentic and reliable	The website has now been migrated to	
information in the subject area	NIC cloud server.	
5. Query-Response/ Referral	About 1900 online, postal, email and in-	-
service to stakeholders.	person queries have been handled by the	
	centre during 2017-18.	
6. Developing and upgrading a	Kids corner has been made interactive by	Kids Sections CMS module
Kids' Corner.	uploading quiz section, video gallery and	has encountered duplicate
	monthly environmental activity	variable problem since July
	highlights and so on. However this	2016 and NIC has not
	section has not been updated after July 2016.	corrected the issue despite several reminders.
7. Maintaining a disaggregated	Website is designed to automatically	-
record of visitors, including	record visitor's log and is reflected in the	
unique visitors, to the Website.	performance chart.	
	aration of State of Environment (SoE) Repo	orts
8. Development of time series	Time series data are regularly fed in	
ISBEID databases on 17	the ISBEID system. Total 631 number	
parameters (except the ones that	of updates were made during 2017-18	
are irrelevant to the State	alone. Till date more than 7000	
Centre) and complement the numeric/statistical databases	updates have been made in the	
with analytical reports and	ISBEID module since inception	
descriptive databases on the		
website of the Centre.		
9. Completing updating ISBEID,	Exhaustive exercise undergone by the	
notably by resolving the	centre to extract data compatible to	
problem of lack of conformity	ISBEID format from the reports	
between format of data	collected from the secondary sources.	
available with State	All the modules relevant to Sikkim	
departments and ISBEID	have data now.	
proformas.	Nodal officers from the line	
10. Devising a mechanism for sourcing for ISBEID data on a	departments have been designated.	
continuous basis from State	Workshop cum meeting of	
Departments concerned and	stakeholders and line departments are	
relevant survey and research	organized to exchange of information.	
institutes country-wide.	-	
11. Referencing and indexing	Sources of data in ISBEID	-
of sources data in ISBEID.	highlighted.	
12. Publishing State of	SoE Report 2016 Sikkim has been	-
Environment (SoE) Reports for	prepared and approved by the State	

Activity/ Target	Achievements	Shortfalls, if any, and reasons therefore
the concerned State/UT with a periodicity of two over a five-year period.	Government. The report is currently under print and will be released accordingly.	reasons therefore
13. Publishing State of Environment (SoE) Reports for metro cities and hotspots.	ENVIS Centre will prepare a proposal for Hotspot Study of Gangtok during 2018-19 and submit to the ministry.	-
Publications and Value-Addition		
14. Publishing 4 Newsletters and uploading the same in the relevant section of ENVIS Website.	Quarterly newsletter published and circulated country wide.	
15. Processing/ analyzing data collected and bringing out value-added information Products	Data collected and analysis report is to be incorporated in the upcoming SoE report.	
16. Collecting books, reports and journals on the subject area; Uploading e-versions of books, reports, etc. on the ENVIS Website. Uploading Abstracts of books, reports, journals and articles of those whose e-versions are not available.	About 250 e-version of the publications relating to status of environment collected from various government sources and published online. ENVIS Sikkim is proudly the official online hosting for all government publications in Sikkim.	
Reaching-out/Networking Activitie		
17. Liaison and coordination with other relevant ENVIS Centres, both State Centres and Thematic Centres, for providing data/information links in the relevant part of the ENVIS Website (to avoid duplication and conflicts in uploaded information).	Duplicity of information in the website is carefully being handled. Centre is referring to data and information available with other centres and hyperlinks have been placed accordingly.	
18. Build linkages with other information sources in the country and abroad. Providing hyperlinks to the information sources in the relevant part of the ENVIS Website.	Hyperlinks to other information sources have been placed in relevant web contents.	
19. Maintaining a list of Experts in the subject area and uploading the same, along with updated C.V., in the relevant section of ENVIS Website.	List of experts updated in the website	
20. Coordination with the Ministry for timely dissemination of relevant and adequate information to stakeholders.	Centre is in frequent communication with the ENVIS Secretariat and other divisions in the ministry for upkeep of information and dissemination.	
21. Formulate strategic plans to generate sources of funds from corporate sector and/ or through subscriptions of Newsletters/ other publications	Sikkim ENVIS Hub was supported by WIRPO Bengaluru for promoting environment education in about 100 schools during 2017.	

Activity/ Targe	t	Achievements	Shortfalls, if any, and reasons therefore
B. SPECIAL ACTIV	ITIES		
22. Focus on database dev (numeric and descripti due authentication in consultation with Line Departments/ research institutes, etc.	elopment Centroleve), with department department.	re is already in sync with 41 line rtments for collection of data and mation.	
23. Network and undertak outreach activities with Universities/ Research researchers in the State the ENVIS collections repositories can be em	bodies/ Deve e, so that Ecolo / Scien	re is working in several research based ities with expert institutions such as elopment Alternatives New Delhi, IORA ogical Solutions New Delhi, Centre for and Environment New Delhi, CEE ahati and so on.	
24. Circulate Newsletters knowledge products to stakeholders as possib State, especially policy planners.	and Arou as many and cole in the to EN	nd 1500 copies of quarterly newsletters other publications have been circulated NVIS partners, Sikkim schools, line rtments, stakeholders, etc.	
25. Link its Website to oth Government Websites the vernacular Website undertake other aware enhancing activities w State.	; develop webs e; and mand ness	ages developed with line department ites and other government websites as latory activity of the centre.	
 Maintain a Register fo track of queries receiv transferred/ answered. 		parate log register is kept at the centre to d visitors, queries and feedback.	
27. Build institutional repo of various types of me related to environment	dia 2500 al issues. and n ENV intern films	re has a library that houses more than reports and publications including DVD nedia collection on environment issues. IS centre has collected about 20 national award winning documentary from CMS VATAVARAN.	
28. Bring out a Brochure of environmental issues t awareness about Worl- Environment Day, foc forestry/ mining/ Clim Change/ disasters/ etc.	o spread broch d information using on centre ate the co	re has published several pamphlets, nures on events and places for quick mation for the users. Visitors to the e are always gifted with such items by entre.	

13.	New initiatives taken during the Financial Year (2017-18):	 ✓ Prepared a pictorial map of South Sikkim ✓ Prepared State of Environment Report 2016 Sikkim, the second edition, first issue was published in 2007. ✓ Prepared an exclusive report 'White Paper' on Forestry, Environment and Wildlife initiatives of the State Government 1994-95 to 2017-18. ✓ Prepared GSDP proposal for 2 month course on 'Ecotourism Manager' in collaboration with ENVIS Ecotourism. ✓ Prepared project proposal titled "Livelihood Options and Employment Generation – Creation of New Ecotourism Opportunities in the Himalayan Ecosystem and submitted for funding under NMHS to G.B. Pant National Institute of Himalayan Environment & Sustainable Development, Almora, Uttarakand. ✓ State ENVIS Hub assisted in a process for nominating a student candidate from Sikkim School Eco-Club for participating in the GLOBE Learning Expedition at Ireland (July 1-7, 2018). Nomination submitted to EE Division (NGC) in the Ministry. ✓ Project initiated –"Preparation of Brief Documents on Wetlands of Sikkim" in conformity with the Wetlands (Conservation and Management) Rules, 2017. State ENVIS Hub to facilitate the project with an expert agency IORA Ecological Solutions Pvt. Ltd., New Delhi selected by the host organization. ✓ Partnered with WIPRO Bengaluru and CSE New Delhi for promoting environment educations at about 300 schools of Sikkim through trainings on action-based projects. ✓ Stakeholder's consultation workshop organized with nodal officers of the line department for liaisoning of data and information to support ENVIS mandate.
14.	Date of most recent physical verification by the Ministry:	Date: 06/05/2016 by Mr. Abhay Kumar, Deputy Economic Adviser, and Mr. Amit Vashishtha, Deputy Director, MoEF, GoI (during Brain Storming Session for North Eastern ENIVS Centre, Gangtok, Sikkim)

15. Status of existing hardware:

	Hardware item	Specification	Sanction Order	Date of
			with Date	procurement
Procured from	Desktop Computer –	HP AIO Intel Core i7, 3.40 GHz, 1	Sanction No:	17/02/2014
ENVIS Grant	1 No	TB HDD, 8 GB DDR3 RAM, DVR	11/68/2004 – EI	
2013-14		Writer, 22" display	Dated:27/12/2013	
	Multifunction	HP AIO (printer, copier, scanner)	-do-	-do-
	printer-cum-scanner-	Color Laser Jet Pro MFP M176n		
	cum-copier - 1 No.			
	UPS – 1 No	600 VA UPS for desktop computer	-do-	-do-

Hardware Procured from ENVIS grant during 2002-03	Hardware provided by the host department, Forests, Environment & Wildlife Management Department,
	Government of Sikkim
1. Desktop Computer – 2 Nos(P-IV, 1 GB RAM,	1. Desktop Computer − 1 Nos
80 GB HDD)	2. Printer – 1 Nos
2. Printer - 1 No (Laserjet black printer)	3. Scanner (Flat bed) – 1 Nos
3. Scanner – 1 (600 dpi flat bed)	4. All in one printer/ copier/ scanner − 1 No
	5. 3 KVA inverter with battery
	6. Telephone (landline 03592-280381)

16. Status of utilization of grant during the financial year 2017-18 as on 31-Mar-2018 and reasons for shortfalls, if any:

	Head of Expenditure	Sanctioned	Actual	Reasons for Shortfall/
		amount (Rs.)	Expenditure (Rs.)	Excess (if any)
Recurring	Manpower	11,88,884	11,88,884	-
Annual	Others	4,65,300	4,65,300	-
	Travel	3,00,000	16,778	-
Non-	Preparation of State of	30,97,500	24,14,990	Report is under print
Recurring	Environment Report 2016-			
	Sikkim			

17. Issues/ hurdles faced in undertaking ENVIS activities:

17.1.	Many users have been complaining about user login failures in our system. The password recovered after login failure is complicated and difficult to remember. The password reset facility is not available for the users. Request sent to NIC several times but action on this remains pending till date.
17.2.	Data collection for ISBEID platform is challenging and painstaking due to non-availability of
	readymade data. At most instances, data is retrieved through rigorous and in-depth study of reports
	from secondary sources which is time taking and hinders timely activity.

18. Proposed Action Plan of Activities for next two years i.e 2018-19 to 2019-20

The action plan of activities for next two years is based on the mandate of the revamped ENVIS scheme and is drawn in accordance to the memorandum of cooperation between the State ENVIS Hub at Forest, Environment and Wildlife Management Department, Government of Sikkim and the EI Division of the Ministry of Environment, Forest and Climate Change, Government of India

- Repository of Environmental Knowledge: ENVIS Hub will collect information pertaining to its assigned subject area 'Status of Environment & Its Related Issues' pertaining to State of Sikkim, maintain and update the subject-specific database, and based on its capability produce value-added including information, educational-kits various themes international as on protocols/conventions/agreements, Rules & Regulations; Legislations; Guidelines; Gazette Notifications, develop mobile apps, e-Books, environmental videos; maintain photo bank; prepare research papers/publications, compendium, abstracts and journals, case studies, success stories and directories of information on State/regional/ National level etc. The information thus collected will be disseminated through a dedicated ENVIS Hub website www.sikenvis.nic.in. Numerical data on the assigned Subject Area will be collected, compiled, processed, analysed and submitted quarterly/annually as required to the ENVIS Focal Point. Research in the form of working papers and reports would also be submitted to the ENVIS Focal Point, which would be uploaded on the ENVIS Portal after due procedure.
- b. **State of Environment (SoE) Report:** To prepare and publish State of Environment Report 2020 highlighting specific issues such as human wildlife conflict, forest fires, landslide case studies, wetlands and glacial studies, green initiatives of the State, etc., and prepare local/district/state level SoERs.
- c. **State of Environment Atlas:** District and State level maps will be created by strengthening the Management Information System (MIS) & Geographical Information System (GIS).
- d. **Grid Based Decision Support System (GRIDSS):** For sustainable management of natural resources, ENVIS Hub will carry out survey of designated districts in a phased manner in 9x9 km grid or less depending on the terrain, for effective survey of various environmental parameters such as air, water, noise, soil quality, solid, hazardous & e-waste, forest & wildlife, flora & fauna, wetlands, lakes, rivers & other water bodies, public health etc. For the survey, secondary data would be taken as base information and if required primary data would also be collected for further analysis. ENVIS Hub will coordinate with the district administration, Universities, students, ENVIS RPs, and other agencies as required.
- e. **Green Skill Development Programme (GSDP):** ENVIS Hub will coordinate all State level green skilling programmes for nature guides, para-taxonomists, and other environment fields, like waste management, Air Quality Monitoring and Testing Analyst/Technician, Soil & Water Quality Analyst/Technicians, Cleaner Production and Effluent Treatment Plant Operator, etc., with ENVIS RPs/institutes/universities/students concerned.
- f. Community-driven Environmentally Sustainable Villages Programme (CESVP): The programme envisages mobilizing communities on environmental issues, creating decentralized models of development empowering local communities, and building the right atmosphere in villages to adopt environmentally sustainable practices on community level.
- g. **Monitoring** (**Ground Truth Verification**) **of Schemes:** ENVIS Hubs will carry out ground truth verification of various Central Sector (CS) and Centrally Sponsored Schemes (CSS) being implemented by the Ministry, as and when required.
- h. **Extension & Outreach Programmes** on environmental information sharing, awareness, education and training of youth/ students/ stakeholders/ local people at the ground level (district/ village level), using educational kits developed by ENVIS Hub.

19. Proposed Annual Action Plan of Activities for 2018-19

The annual plan of activities for 2018-19 in summative is enumerated below;

A. ENVIS activities as per new mandate:

- i. To promote, implement and coordinate Green Skill Development Programme (GSDP).
- ii. To implement and coordinate Grid Based Decision Support System (GRIDSS) programme.
- iii. To participate, implement and coordinate Community-driven Environmentally Sustainable Village Programme (CESVP) as and when intimated by ENVIS Focal Point

B. Ongoing/ Regular ENVIS Activities:

- i. ISBEID data collection and data entry for 2018 year onwards as ongoing activity in all 17 modules. Enriching the Subject-wise database with climate change related information on wetlands, glaciers, forestry, wildlife and so on.
- ii. Publication of Quarterly Newsletters, special edition 60-72 paged PANDA news magazine, and Knowledge products in the form of pocket-sized booklet/ pamphlets/ Short Video Films/ DVDs on Forest Wildlife in Sikkim and Environment Management in Sikkim.
- iii. Extension & Outreach programmes on environmental information sharing, awareness, education and training of youths/ students/ stakeholders/ local people at the ground level (district/ village level).
- iv. Ecological Hotspot study of Gangtok, Sikkim as a Sustainable Tourist Destination with relevance to environment impact assessment on the fragile ecosystem and recommendations.
- v. Preparation of 'Brief Document' on Wetlands of Sikkim in conformity with the Wetlands (Conservation and Management) Rules, 2017.
- vi. Monitoring of key 20+ environment related parameters and reflecting in the spatial form (Pakriti maps, grid based spatial content) as per the directives of the ENVIS secretariat.
- vii. Coordinate National Green Corps (NGC) programmes in Sikkim as a Nodal Resource Agency and collaborate with resource agencies like WIPRO Bangalore, CEE Guwahati and CSE new Delhi in spreading environment and education at the school level.
- viii. Support the host department in environment awareness programmes in the State with resource materials like pamphlets, brochures, handbooks, posters, banners, fyers, signages etc.

<u>ANNEXURE</u> 20. Status of data entry in ISBEID: (Sikkim State ENVIS Hub): As on 31-Mar-2018

	Sub-Module		Period for which data updated			
Module		Fields	State-level		District-level	
		N	Annual	Monthly	Annual	Monthly
		Name No. of Districts (with name)			√	
		No. of Mandals/ Tahsils/ Taluks (with name)	✓		•	✓
		No. of Blocks (with name)	· ✓			· ✓
		No. of Municipalities (with name)	→			√
		No. of Panchayats	<i>'</i>			· ✓
		No. of Cities with million plus population (with name)	✓			✓
		No. of Tribal Settlements				
	1. General	Elevation above mean sea level (Maximum)	√		✓	✓
		Elevation above mean sea level (Minimum)	✓		✓	✓
		Total geographical area	✓		✓	✓
		GDP of the state (Sector wise)				
		- Primary	2000, 2005- 2012			2000, 2005- 2012
		- Secondary	2000,200 5- 2012			2000,200 5- 2012
_		- Tertiary	2000,200 5- 2012			2000,200 5- 2012
I. Adminis-	2. Socio	No. of BPL household in millions	2006		2006	
trative	Economics	% of Household below poverty line	2006		2006	
	3. Climate	Average mean monthly temperature (Max.)		1990- 2000, 2004- 2013		1990- 2000, 2006, 2008- 2014
		Average mean monthly temperature (Min.)		1990- 2000, 2004- 2013		1990- 2000, 2006, 2008- 2014
		Total annual Rainfall		1990- 2000, 2004- 2013		1990- 2000, 2006, 2008- 2015
		Relative Humidity				2006 (E)
		Population (for last 4 decades - 1961 - 71 - 81-91-2001)	1961- 2011		1991- 2011	
	4.	Total Population	1961- 2011		1991- 2011	
	Demography	Males Population	1961- 2011		1991- 2011	
		Females Population	1961- 2011		1991- 2011	

			Period for which data updated				
Module	Sub-Module	Fields	State-level District-level			ct-level	
			Annual	Monthly	Annual	Monthly	
		Density	1961-		1991-		
		Bonsky	2011 1961 -		2011 1981-		
		Area in	2011		2011		
		No of familiar/thousand malas (say ratio)	1961-		1991-		
		No. of females/thousand males (sex ratio)	2011		2011		
		% of Literacy	1961- 2011		1981- 2011		
		% of population attending school	2001		2011		
			2001,				
		Crude Birth Rate (Nos. per 1000 population)	2011				
		Crude Death Rate (Nos. per 1000 population)	2001, 2011				
			2001,		2001,		
		Permanent	2005, 2011		2005, 2011		
			2001,		2001,		
	1 77	Semi- Permanent	2005,		2005,		
	1. Housing		2011		2011		
		Temporary	2001, 2005,		2001, 2005,		
		Temporary	2003,		2003,		
		Average Household Size (Persons per HH)	2005		2005		
	2. Medical and Health Service	No. of Government Hospitals	1990-		1990-		
II.		10. of Government Hospitals	2018		2018		
Infra- structure		No. of Registered private hospitals/ nursing homes	1961 - 2018		1981- 2018		
		No. of Railway Stations					
		Length of Railway Lines					
			1998-				
		Length of National Highways	2018				
	3. Transport	Length of State Highways	1990- 2018		1990- 2018		
		T 1 6 1 1	1998-		2010		
		Length of other roads	2001				
		No. of Domestic Airports					
		No. of international Airports					
		Coal power generation					
		Installed Capacity					
		Gas Power generation					
		Installed Capacity					
		Oil based power generation					
	1. Non-	Installed Capacity					
III.Energy	Renewable	Atomic power generation					
		Installed Capacity	2003-				
		Power from National Grid	2003-				
		Installed Capacity	2003-				
		Installed Capacity	2016 1992,				
						•	

				od for whic	ch data up	dated
Module	Sub-Module	Fields	State		Distri	ct-level
				Monthly	Annual	Monthly
			2000-			
			2012 1992,			
		L . II 1C	1995,			
		Installed Capacity	2000-			
			2012			
		Windmill power generation				
		Installed Capacity				
		Solar photovoltaic power generation				
		Installed Capacity				
		Biogas power generation				
		Installed Capacity				
		Other biomass power generation				
		Installed Capacity				
			2008-			
		Industrial and Commercial	2016			
	2 51	Agriculture	1990-			
	3. Electricity Consumption		2016 2008-			
	Consumption	Domestic	2016			
		Others	1998-			
		Others	2012			
		LPG	2010- 2014			
	4 5	Other Petroleum Products	-			
	4. Energy Consumption	Coal				
	Consumption	Natural Gas				
		Other				
		Total agricultural area				
			2001-			
		Area under non-agriculture use	2013			
		Barren and uncultivable land	1996-			
			2012 1996-		1996-	
		Permanent pasture / grazing land	2015		2013	
		Net irrigated land	1996-			
	1. Agriculture	Tet irrigated faild	2013 1991,			
IV.	Area		1991,			
Agri-	Classification	New Sown area	1999,			
culture			2002-			
			2013			
		Plantation crops	1001			
			1991, 1996,			
		Fallow	2005-			
			2012			
		Area under organic farming thereof				
	2. Agriculture	Tracel and described	2000-		2004-	
	Production	Total production of crops	2002,		2015	
	Production		2004-		2015	

			Peri	Period for which data updated			
Module	Sub-Module	Fields	State	State-level		District-level	
			Annual	Monthly	Annual	Monthly	
			2015				
			2000-				
		Yield of Kharif Crops %	2002,		2004-		
			2004- 2015		2015		
			2000-				
		Yield of Rabi Crops %	2002,		2004-		
		Tield of Rabi Crops 70	2004-		2015		
		Y' 11 C 1	2015				
		Yield of other crops %					
		Name					
		Production					
		Rice	1990-		1991-		
			2016 1990-		2016 1991-		
			1997,		1998,		
		Sowing Area	2000-		2000-		
			2016		2016		
		Production	1990- 2016		1991- 2016		
					1992,		
		Wheat	1992- 2016		1998-		
		Sowing Area			2016		
			1992, 2000-		1992, 2000-		
			2016		2016		
			1992-		1992,		
		Production	2016		1998-		
	3. Crop				2016 1992,		
	Production	Pulses	1992-		1998-		
	(plantation		2016		2016		
	crops) (in	Samina Anna	1992,		1992,		
	million tons per annum)	Sowing Area	2000- 2016		2001- 2016		
	per amium)		1992-		1992,		
		Production	2016		1998-		
		T . 1 C . 1			2016		
		Total food grains					
		Sowing Area					
		Production					
		Cotton					
		Sowing Area					
		Production					
		Jute &mesta					
		Sowing Area					
		Production					
		Sugarcane					
		Sowing Area					
		Production					

	Sub Madula	ule Fields	Period for which data updated			
Module	Sub-Module		State-level		District-level	
			Annual	Monthly	Annual	Monthly
		Tobacco				
		Sowing Area				
		Production				
			1992-		1992-	
		Oil Seeds	2016		2016	
		Sowing Area	1992-		1992-	
		Sowing rice	2016 1992-		2016 1992-	
		Production	2016		2016	
		Caracla	1993-		2004-	
		Cereals	2016		2016	
		Sowing	2000- 2016		2004- 2016	
			1993-		2016	
		Production	2016		2016	
		Others	1996-		1998-	
		Onors	2011		2011	
			1996, 1998,		1996, 1998,	
		Sowing Area	2005-		2005-	
			2011		2011	
			1996,		1996,	
		Production	1998, 2005-		1998, 2005-	
			2003-		2003-	
		Nitrogen				
	4. Fertilizer	Phosphate				
	Consumption	Potash				
		Others				
		Insecticides				
		Fungicides				
	5. Pesticide	Weedicides				
	Consumption	Rodenticide				
		Fumigants				
		Others				
		Total No. of Large Scale Industries	2012			
			2001,			
		Total No. of Medium Scale Industries	2004,			
	1. Category of		2012			
	Industry	Total No. of Small scale Industries	2001-			
V.		Total No. of Red Category Industries				
Industries		Total No. of Orange Category Industries				
		Total No. of Green Category Industries				
		Iron				
	2. Mining &	Copper	1998- 2002			
	Quarrying	Lead	1998- 2002			

Module		Fields	Period for which data updated			
	Sub-Module		State-level		District-level	
			Annual	Monthly	Annual	Monthly
		Zinc	1998- 2002			
		Nickel				
		Manganese				
		Bauxite				
		Coal				
		Other (Chromite)				
		Name of the Mineral Resources				
		Name and location of Heritage sites			✓	
VI.		Name and location of Religious places/centres			✓	
VI. Tourism & Heritage	1. Tourism & Heritage	Name and location Archaeological monuments/sites			✓	
		Name and location of Scenic Areas			✓	
		Name and location of Tourist Resorts				
		Total Geographical Area	1990- 2017		1990- 2017	
		Forest	1996 - 1997, 2005- 2013			
		Non-Agriculture use	1996- 1997, 2001- 2013			
		Barren and uncultivable land	1996 - 2012			
		Permanent pastures and other grazing land	1996- 2013		1996- 2013	
	1. Land Use Classification	Miscellaneous tree crops and groves	1996- 2011			
VII. Natural Resources		Cultivable wasteland	1996- 1997, 2001- 2011			
Resources		Fallow land other than current fallow	1996- 1997, 2001- 2011			
		Current fallow Net area sown	1996- 1997, 2005- 2011			
		Gross cropped area				
		Area sown more than once	2001- 2011			
		Net irrigated area				
		Gross irrigated area				
		Others	2001- 2002, 2005-			

			Period for which data updated			
Module	Sub-Module	Fields	State-level		District-level	
			Annual	Monthly	Annual	Monthly
			2011			
		De sue de d'Ion d'ause	2005-		2006-	
		Degraded land area	2016		2016	
		Degraded Irrigated land				
		Area affected by shifting cultivation	2000- 2016		2000- 2016	
	2. Land	Deforestation rate				
	Degradation	Total salt affected land				
		Salinization rate	2000- 2009, 2016		2000- 2009, 2016	
		Area effected by desertification	2010		2010	
		Gullied & or Ravenous Land %	1990- 2016		1990- 2016	
			2000-		2000-	
		Upland with or without Scrub %	2011		2011	
		Water Logged & marshy Land 0/	1990-		1990-	
		Water Logged & marshy Land %	2016		2016	
		land affected by Salinity/Alkalinity Coastal/ Inland %	1990- 2016		1990- 2016	
		Underutilized Degraded Notified Forest Land	2000-		2000-	
		%	2000-		2000-	
			1990-		1990-	
		Shifting Cultivation Area %	2016		2016	
	3. Waste Land	Degraded Land under Plantation Crops %	1990-		1990-	
		Degraded Land under Flantation Crops 70	2016		2016	
		Degraded Pastures/Grazing Land %	1990- 2016		1990- 2016	
			1990-		1990-	
		Mining Industrial Wastelands %	2016		2016	
		Sands - Deserted Coastal %				
			2001-		2001-	
		Steep Slopping Area %	2004		2004	
		Barren Rocky/Stony Waste/Sheet Rocky	2001-		2000-	
		Area %	2011		2011	
		Snow Covered and/or Glacial Area %	2000-		2000-	
			2011		2011	
		Names of wetlands of national importance	2000-		2000-	
		Names of wetlands of international importance (Ramsar site etc.)				
		Coastal /Estuaries				
	4. Types of	Fresh water Lakes	2005- 2015		2005- 2015	
	Wetlands	Tanks/Ponds/Reservoirs/Dams	1997- 2015		1997- 2015	
		Marshes (Tidal/Non-Tidal)	2013		2013	
		Swamps				
		Mangroves				
		Flood Plains				

			Period for which data updated			
Module	Sub-Module	Fields	State-level		District-level	
			Annual	Monthly	Annual	Monthly
		Total Area of Wetland	1997- 2011		1997- 2011	
		Others				
		Black Soil				
		Red Soil				
		Desert Soil				
		Grey and Brown Soil				
		Saline & Alkaline Soil				
	5. Soil Types	Laterite Soil				
		Alluvial Soil				
		Mountain Soil	1990- 2018		1990- 2018	
		Mix Red & Black Soil				
		Peaty Soil				
		Dense Forest	1990- 2016		1998- 2016	
		Open Forests	1990-		1988-	
			2016		2016	
	1. Distribution	Mangroves	2010-			
	of Forest Cover	Trees outside forests	2010-			
		Numbers				
		Area in				
		Non Forest	1995- 2015		2013- 2015	
		D IF (1990-		2002-	
	2 D 1 1	Reserved Forest	2015		2015	
	2. Recorded Forest	Protected Forest	1990- 2015		2002- 2015	
	1 51650	Unclassed Forest	1990- 2001		2002- 2001	
VIII.		Bauxite				
Forest Resource		Chromite				
	3. Mining in	Copper				
	Forests	Iron				
		Manganese				
		Others				
	4. Actual	Dense Forest (Crown density Cover Area above 40%) (in ha)	1990- 2016		1998- 2016	
	Forest Cover by Density	Open Forest (Crown density 10- 40% (in ha)	1990- 2016		1998- 2016	
	Class	Mangrove (in ha)	2010		2010	
	5. Forest Produce	Timber poles	2002, 2005- 2007, 2010- 2011			
		Fuel wood	1997-			

			Period for which data updated			
Module	Sub-Module	Fields	State	e-level	Distri	ct-level
			Annual	Monthly	Annual	Monthly
			2001,			
			2010- 2011			
		Pulp & match Wood	2011			
		Sal seeds				
		Kandu/Bedi leaves				
		Gums & Resins				
		Cane/Rattan & Bamboo				
		Grass /Fodder				
		Drugs/Tannins				
			1990, 1995,			
		Spices	1993,			
			1999			
		Lac				
		Others	2002- 2007			
	6. Joint Forest	Name of District			2002- 2013	
	Management Committee	No. of JFMC	1998- 2013		2002- 2013	
		Name of River	1990-		2013	
		Total Length	2016 1990- 2016			
		Catchment Area	2010			
		Seasonality (Perennial/Seasonal)	1990- 2017			
		Canals (Length)	2017			
IX.	1. Source of	Reservoirs				
Water Resource	Water	Tanks, Lakes & Ponds				
resource		Brackish Water				
		Government Owned Canals				
		Private Canals				
		Tanks				
		Wells				
		Tube Wells				
		Total Replenishable Ground Water Resource	2008- 2010			
		Provision for industrial/ domestic/ other uses	2008- 2011			
X.		Available Ground Water Resource				
Ground Water	1. Status of	Net Draft				
water Resource	Ground Water	Balance Ground Water				
111300100		Level of Ground Water Development (%)				
		Utilization Ground Water Resource for irrigation in Net terms	2008- 2011			

			Period for which data updated			
Module	Sub-Module	Fields	State-level		District-level	
			Annual	Monthly	Annual	Monthly
		Over Exploited	2008- 2011		2008- 2011	
		Critical Area	2008- 2011		2008- 2011	
		Gross Draft Estimated on Pro-rata basis	NA		NA	
		Pre-Monsoon average depth to water level				
	2. Categorization	Post Monsoon average depth to water level				
	of Water	No. of Over Exploited Area	2010- 2016		2010- 2016	
	Level	total Ground Water Resource	2010		2010	
		Quantity of ground water for irrigation				
		Available ground water for irrigation				
	3. Use of Ground Water	Utilizable ground water for irrigation	2008- 2011		2008- 2011	
		Net ground water draft	2008- 2011		2008- 2011	
	1. Ecological Areas	Name of Biogeographical Zones	✓ ·		2011	
		Name of National Parks	2006- 2018			
		Name of Wildlife Sanctuaries	1990- 2018			
		Name of Bird Sanctuaries	2005- 2018			
	2.Ecology	Name of Tiger Reserves				
	Type	Name of Elephant Reserves				
		Name of Biosphere Reserves	1998- 2018			
		Name of Protected Mangroves area (Private & Public)	2010			
XI.		Name of Botanical Garden				
Ecology	3. Botanical	Area of Botanical Garden	1998- 2018			
	Gardens	Location	1998- 2018			
		Uniqueness	2010			
		Name of Zoological Park	1998- 2018			
	4 700100ins1	Area of Zoological Park	1998- 2018			
	4. Zoological Parks	Location	2010			
		Uniqueness				
	5. Physiographic	Mountain Name	1994- 2018			
	al Features	Height (Meter)	1994- 2018			

Module	Sub-Module		Peri	Period for which data updated			
		Fields		State-level		District-level	
			Annual	Monthly	Annual	Monthly	
		No. of Town covered	2010-				
	1. Hygiene &	No. of Town not covered	2013				
	Sanitation		2010-				
	Sumumon	Total No. of treatment plants	2013				
		Type of Disease	2005-		2005-		
X711	2. Air Borne		2015 2005-		2015 2005-		
XII. Sanitation	Disease	Name of Disease	2015		2015		
Samanon		No. of Deaths	2005-		2005-		
			2015 2005-		2015 2005-		
	2 Water	Type of Disease	2003-		2003-		
	3. Water Borne	Name of Disease	2005-		2005-		
	Disease	Tvame of Disease	2014		2014		
		No. of Deaths	2005- 2014		2005- 2014		
			2001,	2010-	2001,	2010-	
ļ		River Name	2006,	2013	2006,	2013	
			2008, 2010-		2008, 2010-		
ļ			2016		2016		
		Location	2001,	2010-	2001,	2010-	
			2006,	2013	2006,	2013	
			2008,		2008,		
			2010- 2016		2010- 2016	08, 10- 16 01, 2010-	
		BOD	2010		2010		
		BOD	2001,	2010-	2001,	2010-	
			2006,	2013	2006,	2013	
		COD	2008,		2008,		
	1		2010-		2010-		
	1.		2017	2010-	2017	2010-	
XZIII			2001, 2006,	2010-	2001, 2006,	2010-	
XIII.		Ph	2008,	2013	2008,	2013	
Water Pollution			2010-		2010-		
ronundn			2017		2017		
			2001,	2010-	2001,	2010-	
		Total Coliform	2006, 2008,	2013	2006, 2008,	2013	
			2010-		2010-		
			2017		2017		
			2001,	2010-	2001,	2010-	
			2006,	2013	2006,	2013	
		Conductivity	2008, 2010-		2008, 2010-		
			2010-		2010-		
		Lake Name	2001		2001	<u> </u>	
		Location	2001		2001		
		BOD	2001		2001		
		COD	2001		2001		

	Sub-Module	Fields	Period for which data updated				
Module			State-level		District-level		
			Annual	Monthly	Annual	Monthly	
		Total Coliform					
		Conductivity					
		SO_2					
		NOx				2010-	
	1 7 1	Tion				2013	
	1. Industrial	Suspended Particulate Matter (SPM)				2010- 2013	
		Respirable Suspended Particulate Matter (RSPM)				2013	
		SO ₂				2013	
						2001,	
		NOx				2003-	
						2004	
XIV.	2. Residential	Suspended Particulate Matter (SPM)				2001,	
Air		,				2004	
Pollution		Respirable Suspended Particulate Matter (RSPM)				2001, 2003-	
						2003-	
		No. of Vehicles	1995,		1995,		
			1998-		1998-	2000	
			2001, 2003,		2001, 2003,		
			2003,		2003,	2012	
	3. Vehicular		2009		2009	2009- 2012	
	Pollution		1995,		1995,		
			1998-		1998-	2000	
		Type of Vehicles	2001, 2003,		2001, 2003,	2009- 2012	
			2003,		2003,	2012	
			2009		2009		
			1990,				
		Total Species (RET)	2007, 2013-				
XV.	1. Flora		2013-				
Bio-		Redbook species No.					
diversity		Total Species (RET)	2012				
	2. Fauna	Redbook species No.					
		Hazardous waste (HW) in t/a					
		E-waste thereof in t/a					
			2006,				
			2008-				
		Biomedical waste (BMW)	2009,		2006		
XVI.	1. Type of		2011- 2013				
Waste	Waste		2015		2005		
		Municipal Solid Waste (MSW)	2011,		2005, 2011		
			2012		2011		
		Plastic Waste					
		Waste Water					
		Treatment/Disposal (for all 5)					

Module	Sub-Module	Fields	Period for which data updated				
			State	State-level		District-level	
			Annual	Monthly	Annual	Monthly	
	2. Clean	Type of Industries					
	Technology	Name of technology used					
	3. Effluent Treatment Plant/CEPT	Name of District					
		No. of Plants					
		Type of Disaster	1990- 2016		1990- 2016		
XVII.		Year	1990- 2016		1990- 2016	ct-level	
Disaster	1. Disaster	Affected districts in nos.	1990- 2016		1990- 2016		
		Population affected (in millions)					
		Damage in crore INR					

.

Annex-II

Other Activities

Training, Extension, Awareness and Outreach Activities during 2017-18

1. Stakeholder's Consultation Workshop held



ENVIS Sikkim at Forests, Environment & Wildlife Management Department, Government of Sikkim, Gangtok organized stakeholder's consultation workshop with more than 30 line departments for the preparation of State of Environment Report 2016 Sikkim on April 24, 2017 at Sidkeong Tulku Forest Conference Hall, Deorali, Gangtok.

2. Chief Minister's Green School Rolling Trophy and State Green Schools Awards 2017 on the occasion of World Environment Day Celebration on June 5, 2017



ENVIS Sikkim actively played a role of the resource agency in scrutinizing and screening the reports from about 150 schools for the State's most prestigious award scheme, the Chief Minister's Green School Rolling Trophy and State Green Schools Award 2017. ENVIS Centre has been playing the role of nodal agency in implementing this award scheme in the State since its inception in 2011. The 2017 awards were presented to eight schools during the State level celebration of World Environment Day on 5th June 2017 at Kaluk BAC premises, West Sikkim. Other activities included plantation drive, cultural programmes, yoga demonstration, felicitation of dedicated foresters and public address by the senior forest officials and political dignitaries.

3. Paryavaran Mahotsav 2017: Swachh Bharat Pakhwada June 15-30





ENVIS Centre played active role in coordinating the 5th successive Paryavaran Mahotsav in Sikkim duly celebrating Swachh Bharat Pakhwada from June 15 to June 30, 2017. This fortnightly event which included the 12th phase State Green Mission and 9th Phase Ten Minutes to Earth programme was carried out throughout the State. The Centre's role was to spread mass awareness and publicity through online and print media. The centre designed and printed programme banners, posters, signages for signature campaign on green pledge, Go Green stickers for vehicles. The main objective of the program was to educate and encouraging people to be responsible towards environment and also bring awareness about different initiative taken by the government in order to preserve our ecosystem. During this fortnight, ENVIS compiled and recorded a total of 2.34 lakh seedlings planted across the State.

4. Teacher's Orientation on WIPRO's Earthian Schools Programme 2017

Sikkim State ENVIS, Forest Environment & Wildlife Management Department in collaboration with WIPRO Bengaluru conducted green teacher's training programme for 100 schools across of the State on 29th July 2017 at Namchi DAC for South and West district schools and on 31st July 2017 at Forest Conference Hall, Gangtok for North and East district schools.





Picture (Top) Group photo of training session for South and West District Schools at Namchi (Below) Group photo of training session for East and North District Schoolsat Gangtok

5. Swachhta Hi Seva campaign organized at the office premises of Forest Secretariat, Gangtok, Sikkim on September 23, 2017 by taking up Green Pledge and cleanliness drive of the offices and its premises.





6. Celebration of World Ozone Day -30^{th} Anniversary of Montreal Protocol



World Ozone Day 2017 with the UNEP theme "Caring for all life under the sun" was observed and celebrated across the State of 16th Sikkim on the September 2017 with several preevent and during the activities. Sikkim State ENVIS Centre at Forests, Environment & Wildlife Management Department, Government of Sikkim, functioning as a part of the State Nodal Agency for National Green Corps School Eco-Club programme coordinated and conducted

following activities from 11th September to 16th September 2017 to commemorate the 30th anniversary of Montreal Protocol for the preservation of ozone layer that supports entire life on earth:

- Painting and Slogan writing competition at about 400 eco-club schools of the State on the theme "Protection of Ozone layer"; and submission of best entries in the ozone portal www.ozone30mp.nic.in
- Wide Publicity through ENVIS portal (http://sikenvis.nic.in/ViewEvents.aspx?Id=5359&Year=2017); Publicity through digital billboard at Forest Secretariat premise of Gangtok; Dissemination of posters in print, videos to schools at rural areas through block administrative centres.
- Coordination of rally/ banner campaign/ signature campaign/ morning assembly speech by school students across the State.
- Awareness/ video screening at various schools of the State; and at Forest Secretariat for schools at Gangtok, the capital town of Sikkim.
- Field Activity: Outreach interactive programme amongst students and electronic vendors/ service centers/ local people / tourists

7. Green Teacher's Training for 250 schools of Sikkim



Sikkim State ENVIS Hub organized a two day green teacher's training on environment auditing at schools focusing on water and sanitation in partnership with Centre for Science and Environment, New Delhi. The training attended by about 200 schools across the State was held at Forest Conference Hall, Gangtok on October 12-13, 2017.

8. State level Earthian Schools Award organized





Orientation of School Eco-club and State-level Awards on WIPRO's Earthian school programme was organized by ENVIS Hub at Gangtok, East Sikkim and at Namchi, south Sikkim on February 26th and 28th respectively.

9. International Day of Forests observed on theme "Forests and Sustainable Cities" at Sidkeong Tulku Forest Conference Hall, Gangtok on 21st March, 2018.

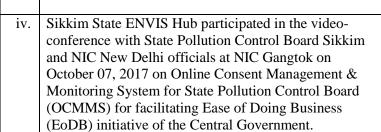


The senior officers of the host institution along with State ENVIS Hub met and interacted on the current forestry and environmental issues to commemorate the International Day of Forests. ENVIS hub shared in ppt form the poster prepared by ENVIS RP IFGTB (circulated through ENVIS WhatsApp group). State ENVIS hub also made screening of short documentary film "Ecosystem: Mountain, Forest and Meadow".

10. Trainings/ Meetings attending by ENVIS during 2017-18

i. ENVIS Sikkim attended a one day training-cum orientation on PFMS on 17th August, 2017 organized by PFMS Sikkim Unit, State Finance, Revenue & Expenditure Department at Gangtok. ENVIS Sikkim also received PFMS login credentials.

- ii. ENVIS Sikkim participated in the hands-on training on the EAT module of PFMS on September 11-12, 2017. The hands-on training was imparted by Mr. Sourav Hazarika, Operation Manager, PFMS Sikkim Unit of State Finance, Revenue & Expenditure Department at Gangtok.
- iii. ENVIS Sikkim participated in the ENVIS National Workshop-cum-Training on GRIDSS at BISAG, Ghandinagar, Gujarat on September 21-23, 2017







- v. Meeting with Dr. D K. Agrawal, Scientist 'D' and In-charge, Botanical Survey of India (BSI), Gangtok, Sikkim in regard to Green Skill Development Programme (GSDP) on October 24, 2017.
- vi. Sikkim State ENVIS attended 2nd round of PFMS training on EAT module at Accounts and Administrative Institute (AATI), Gangtok on October 27, 2017 organized by State Finance, Revenue and Expenditure Department.
- vii. Meeting with Shri Abhinay Bhandari, Consultant, Renewable Energy Application and Consultation in Himalayas (REACH) on November 6, 2017 for stakeholder partnership and exchange of information on viable renewable energy applications in Sikkim.
- viii. Brainstorming and stakeholders interaction to discuss the preparation of project proposal for funding under NMHS in partnership ENVIS RP Ecotourism, ECOSS and TMI Gangtok on November, 2017
 - ix. Meeting with NIC New Delhi officials Mr Anil Kumar and team along with the officials of State Pollution Control Board (SPCB) on facilitation of online consent management system for Sikkim State at NIC, Gangtok on December 6, 2017.



- x. Meeting with the SIBIN group on development of e-permit and employee management system for the host department in consultation with the Additional Secretary, Administrative division.
- xi. Stakeholder consultation with Eco-Tourism and Conservation Society of Sikkim (ECOSS) for formulating action plan (proposal) for Global World Environment Day celebration from Jan 15 to May 15, 2018.
- xii. Networking with UNDP Sikkim team for conceptualizing the framework for monitoring the State's Action Plan on Climate Change (SAPCC). Meeting held on March 29, 2018 at ENVIS Hub office for demonstrating ENVIS and ISBEID portal as useful tool.



11. Official Release of ENVIS Publication 2017-18

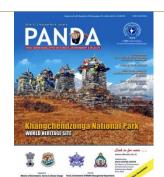


Release of 'PANDA' Newsletter Vol 9 by Hon'ble Forest Minister Shri T W Lepcha and other dignitaries during the State level celebration of World Environment Day on June 05, 2017 at Kaluk BAC premises, West Sikkim.



Release of 'Paryavaran Mahotsav 2016' pictorial activity booklet by the Hon'ble Governor Shri Shriniwas Patil during the Ten Minutes to Earth plantation programme on the 25th of June, 2017 at Raj Bhawan complex, Gangtok.

ENVIS SIKKIM PUBLICATION 2017-18



60 paged special edition Newsletter Vol 9



12 paged quarterly newsletter Vol 10, Issue 1



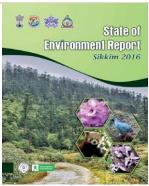
12 paged quarterly newsletter Vol 10, Issue 2



12 paged quarterly newsletter Vol 10, Issue 3



92 paged pictorial activity booklet on Paryavaran Mahotsav 2016



126 pages – State of Environment Report 2016 Sikkim (Under print)



165 pages –White Paper on Forestry, Environment and Wildlife initiatives of the State Government from 1994-95 to 2017-18 (Restricted Document)



Bilingual (English and Nepali) pamphlet on Environment Initiatives of State Government for newly elected panchayats